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GAATTCGGACGAGGCGGGTTGCAGTATGAGTCGCAATCGGACCTAGTGAGGAGCTTCTTGGAGCAGCAGGAG 75
M S R Q S D L V R S F L E Q Q E 16

GCCCGGGACCAACCGGAAGGGGCAATCCTCGCCGAGTTCAGCGACATTAAGGCCCGCTCAGTGGCTTGAAG 150
A R D H R K G A I L A R E F S D I K A R S V A W K 41

ACTGAAGGTGTGTGCTCCACTAAAGCCGGCAGTCAGCAGGAACTCAAAGAAGAACGCTACAAAGACGTGGTA 225
T E G V C S T K A G S Q Q G N S K K N R Y K D V V

CCGTATGATGAGACGAGAGTCATCCTTCCCTGCTCCAGGAGGAAGGACACGGAGATTACATTAATGCCAACTTC 300
P Y D E T R V I L S L L Q E E G H G D Y I N A N F

ATCCGGGCACAGATGGAAGCCAGGCTACATTGCGACGCAAGGACCCCTGCCTCACACTCTGTGGACTTCTGG 375
I R G T D G S Q A Y I A T Q G P L P H T L L D F W

CGCCTGGTTTGGGAGTTTGAATCAAGGTGATCTTGATGGCTGTGAGGAGACAGAAATGGACGGAGGAAGTGT 450
R L V W E F G I K V I L M A C Q E T E N G R R K C

GAAAGCTACTGGGCCAGGAGCGGGAGCCTCTACAGGCCGGGCCCTTCTGCATCACCTGACAAAGGAGACAGCA 525
E R Y W A Q E R E P L Q A G P F C I T L T K E T A

CTGACTTCGGACATCACTCTCAGGACCTCCAGGTTACATTCCAGAAGGAATCCCGTCTGTGACACCACTACAG 600
L T S D I T L R T L Q V T F Q K E S R P V H Q L Q

TACATGTCTTGGCCGACACGGGGTTCCAGCAGTTCGGATCACATTCTCACCATTGGTGGAGGAGGCCCGTTGC 675
Y M S W P D H G V P S S S D H I L T M V E E A R C

CTCCAAGGACTTGGACCTGGACCCCTCTGTGTCCACTGCAGTGTGCTGGCTGTGGACGAACAGGTGTCTTGTGTGCT 750
L Q G L G P G P L C V H C S A G C G R T G V L C A

GTTGATTACGTGAGGCAGTGTCTTCTGACTCAGACAATCCACCAATTTGAGCCTCTTTGAAGTGGTCTCTGGAG 825
V D Y V R Q L L L T Q T I P P N F S L F E V V L E

ATGCGGAACAGCGACCTGCAGCGGTGCAGACAGAGGAGCAGTACAGTTCCTGTACCAACAGTGGCTCAGCTA 900
M R K Q R P A A V Q T E E Q Y R F L Y H T V A Q L

TTCTCCGCACTCTCCAGAACACAGTCCCTCTACAGAACCTCAAGGAGAACCGCTCCAATCTGCAAGGAC 975
F S R T L Q N N S P L Y Q N L K E N R A P I C K D

TCCTCGTCCCTCAGGACCTCCTCAGCCCTGCCTGCCACATCCCGCCACTGGGTGGCGTTCCTCAGGAGCATCTCG 1050
S S S L R T S S A L P A T S R P L G G V L R S I S

GTGCTGGGCCACCGACCTTCCATGGCTGACACTTACGCTGTGGTGAGGAGCGTGGCGCTTCCGCGAGCACA 1125
V P G P P T L P M A D T Y A V V Q K R G A S G S T

Fig. 1a

10087993.030502

GGGCCGGGCACGCGGGGCCCAACAGCAGCGACACCCGATCTACAGCCAGGTGGCTCCACGTATCCAGCGGGCC 1200
G P G T R A P N S T D T P I Y S Q V A P R I Q R P

GTGTACACACCGAAAAACGCGCAGGGGACAACGGCACTGGGCGGAGTTCTGCGGATGAAAACCTTCCGGGCCT 1275
V S H T E N A Q G T T A L G R V P A D E N P S G . P

GATGCCTATGAGGAAGTAACAGATGGAGCGCAGACTGGTGGGCTAGGCTTCAACTTGCGCATTGGAAGACCTAAA 1350
D A Y E E V T D G A Q T G G L G F N L R I G R P K

GGGCCACGGGATCCTCCAGCGGAGTGGACACGGGTGTAATGAGTGCTGTACCAGTTCACGCTGTCACTCAGTGG 1425
G P R D P P A E W T R V

TGGCTGGGCGACTGCAACCCCATGCTGCTGTGTGCTGTCTTATGTATGAGTGGGACTCATGGGCTGAATCAA 1500
ATAAAAGTTTCTCAGGGTAGAAAAACAAATAGGGACTTTGGCCAGTGGTTATAGCAGTCAAAGCCAGGGGCTA 1575
GGAGGGGTAAAGTGGGGGAGGTGGTGGATCTACTCTGAGAAAGTTTAGGAAAGCACATCAAGAGTGAGCATCGCCA 1650
CTCTTCTCCCATACACCTACTGGAAGTGCACCCAGACAGAGTCTCACTTGACAGTGACCTCAGACAGGTC 1725
GCTACCTGGATGGACATGCTGGCCCTACAGCTAGAGACATGTCTAATTAGATCCTCATGTAACCTTGCAATGAGC 1800
TAGAAAGATCTCCGTCTGGTCAGGGAATGGATCACCTAGTCAGGTAATAGTGTGCCATCCAGAAGACAGAACT 1875
GCAAGATACCGTCTTTCTCAAAATGGAAGAAAATAGATCCTCAAGAATAAATGTATGTACAATGCTCTACGCCCT 1950
GATCCTGCCCTGCCTCACTGCCATAATGTCACAAACAAGTCAGGGTCTATATGACAGTTGTTTCATCTAGTCAGTC 2025
CTGACTGTGGCCTCTGCAAGGCTCAGATAGTGCCCTTCTGCAGACTCTTGAATGCCCGTCTTGAACCTGATGAAAG 2100
CTTCTACCGGGAACTTGTAACATCATTAATAATTATTAATGTAGAATTCAATAAAGAGTGGGTCAAAAACCTCAA 2175
AAAAAAAAAAAAAAAAAAAAAAGTTCGAGAGTACTTCTAGAGCGGGCGGG 2225

Fig. 1b

<i>Fig. 2a</i>	<i>Fig. 2b</i>	<i>Fig. 2c</i>
<i>Fig. 2d</i>	<i>Fig. 2e</i>	<i>Fig. 2f</i>

Fig. 2

<i>Fig. 3a</i>	<i>Fig. 3b</i>
<i>Fig. 3c</i>	<i>Fig. 3d</i>

Fig. 3

AATTCCGGGCGCCAGTCCCGCTCCGCGCGCGCGCTCCGCTCCGGCTCGGGCTCCGGCT
 CGACCTCCAACCATGGCCCGTGGCCAGGCGCTCGTGCTGGCACTCACCTTCCAGCTCTGC
 1 M A R A Q A L V L A L T F Q L C

 GTGCCCTGCGAGTACAGCCAGGCCAGTACGATGACTTCCAGTGGGAGCAAGTGCGAATC
 37 V P C E Y S Q A Q Y D D Y Q W E Q V R I

 TCCAGCATGCCCCAGGCCAGCGAGCCCATGTTCATCTTCCAGAGCCTGAGCGAGAATGAT
 77 S O H A P Q Q R A H V I F Q S L S E N D

 CGCGTCTACGTGCGGTTAATGGGGCCCCCTGGCGAGTGCTGTGTGGAATATGACTGGA
 117 G V Y V R V N G G V L A S A V W N M T G

 TATCAGGTGCTGTTTGAGGCCCTCATCTCCCCAGACCGCAGGGGCTACATGGGCCCTAGAT
 157 Y Q V L F E A L I S P D R R G Y M G L D

 GTGGAGGTCAACGCGGGCCAGAACGCGTGGTTCAGTGCATGGCCGCGGGAGAGCCCATG
 197 V E V N A G Q N A S F Q C M A A G E P N

 ACATCAGCCACCGGTTCTTGCCCACTTTCCCGCTGGCTGCCGTGAGCCGCGCCGAGCAG
 237 T S A T G F L A T F P L A A V S R A E Q

 ATCGTCAAGGAGCCCCAACTCCCATCGCGCCCCACAGCTGCTGCGTGCTGGCCCCACC
 277 I V K E P P T P I A P _ P _ Q _ L _ L _ R _ A _ G _ P _ I _

 GAGATTGAGTACCGCATGGCGCGCGGGCCCTGGGCTGAGGTGCACGCCGTGACGCTGCAG
 317 E _ I _ E _ Y _ R _ M _ A _ R _ G _ P _ W _ A _ E _ V _ K _ A _ V _ S _ L _ Q _

 CGTCCCGGAGACGGCGCACTGGCCGCTGGGCCACCCCTCATCAGCGCACCAAAATGCGC
 357 R _ P _ G _ D _ G _ G _ T _ G _ R _ W _ A _ T _ P _ H _ Q _ P _ H _ Q _ M _ R _

 CTGCAGTGGGAACCACTGGGCTACAACGTGACGCGTTGCCACACCTATACTGTGTGCTG
 397 L _ Q _ W _ E _ P _ L _ G _ Y _ N _ V _ T _ R _ C _ H _ T _ Y _ T _ V _ S _ L _

 GAGCAAGGTGTGACCGCTACACCATCAAGAACCTGCTGCCCTATCGGAACGTTACGCTG
 437 E _ Q _ G _ V _ S _ R _ Y _ T _ I _ K _ N _ L _ L _ P _ Y _ R _ N _ V _ H _ V _

 GATGAGGATGTGCCAGTGGGATTGCAGCCGAGTCCCTGACCTTCACTCCACTGAGGAGC
 477 D _ E _ D _ V _ P _ S _ G _ I _ A _ A _ E _ S _ L _ T _ P _ T _ P _ L _ E _ D _

Fig. 2a

CGCCTCGGGCTGGGCTCGGGCTCCGGGGGCGGCGTCCCGCGCCGGGCCCCGGGACGCGC 120
 GC CGCGGAGACCGAGACTCCGGCAGCTGGCTGCACCTTCGAGGAGGCAAGTGACCCAGCA 240
A P E T E T P A A G C T F S E A S D P A

CACCCCTGGCACCCGGGCACCTGCGGACCTGCCCCACGGCTCCTACTTGATGGTCAACACT 361
 H F G T R A P A D L P H G S Y L M V N T

ACCCACTGTGTGCAGTTCACTACTTCTGTACAGCCGGGACGGCACAGGCGGCACCCGTG 481
 T H C V Q F S Y F L Y S R D G T G G T L

TCCACGGCCGTCAGTGGCACCAGGCTGAGCTGGCTGTCAGCACTTTCTGGCCCAATGAA 601
 S H G R Q W H Q A E L A V S T F W P N E

GACATCTGCTTCTCAGCTACCCCTGCGCAAGGCCCCACACTTCTCCGCGTGGGCGAC 721
 D I L L L S Y P C A K A P H F S R L G D

CGCCAACGCTTCTCTTGAACGGCAGAGCGGGGCCCTGGTGCCGCGCGGGGCGTTGCGC 841
 R Q R F L L Q R Q S Q A L V P A Q A F G

GACCTGTACCGCTGTGTGTCCAGGCCCGCGCGGCGGCTCTCTAACTTCCCGAGAGCTC 961
 D L Y R C V S Q A P R G G V S N F A E L

TACCTCATCATCCAGCTCAACACCAACTCCATCATTGGCGACGGGCCGATCGTGCGCAAG 1081
Y L I I O L N T N S I I G D G P I V R X

ACCTACAAGCTGTGGCACCTCGACCCCGACACAGACTATGAGATCAGCGTGCTGCTCAGC 1201
T Y K L W H L D P D T E Y E I S V L L T

AGAGCCCATGAGGGCCCCAAGGCCCTGGCTTTTGCTGAGATCCAGGCCGTCAGCTGACC 1321
R A H E G P K G L A F A E I Q A R Q L T

TGCTATCACTACACCTTGGGCAGCAGCCACAACCAGACCATCCGAGAGTGTGTGAAGACA 1441
C Y H Y T L L G S S H N Q T I R E C V K T

AGGCTTGTCCTCACTAACCTGAGGGGCGCAAGAGGGCAAGGAGGTCACTTTCCAGAGC 1561
R L V L T N P E G R X E G K E V T F Q T

ATGATCTTCTCAAGTGGGAGGAGCCCCAGGAGCCCAATGGTCTCATCACCCAGTATGAG 1681
H I F L K W E E P Q E P N G L I T Q Y E

Fig. 2b

517 ATCAGCTACCAGAGCATCGAGTCATCAGACCCGGCAGTGAACGTGCCAGGCCACGACGT
 I S Y Q S I E S S D P A V N V P G P R R
 557 ACCTACCTGTTCTCCGTGCGGGCCGCGACAGGCAAAGGCTTCGGCCAGGCGGCACTCACT
 T Y L F S V R A R T G K G F G Q A A L T
 597 GCGAGTCTGAGAACCATCACCGTGCTGCTGAGGCCGGCACAGGGCCGCGGTGCGCCC
 G E S E N T I T V L L R P A Q G R G A P
 637 TGGACAGGACTGCTTCCAGTGCCATTGACCTTCGAGGCGGCGCTGGCCCCAGGCTGGTG
 W T Q L L P S A I D L R G G A G P R L V
 677 GGTGACAACCAGACCTACCGAGGCTTCTGGAACCCACCACTTGAGCCTAGGAAGCCTAT
 G D N Q T Y R G F W N P P L E P R K A Y
 717 ATTGCCAGGAAAGCTGCCGTGCAAGGAAAGCAAGCGGCCCTGGAGGTGTCCAGAGATCG
 I A R K A A C K E S K R P L E V S Q R S
 757 CTGGGTGCCATCATTGTGCATCATCCGCAAGGGAAGCCGGTGAACATGACCAAGGCCACC
 L G A I I V I I R K G K P V N M T K A T
 797 CAGAGCACCTGCAGGAGGACGAGCGGCTGGGCCCTGTCTTCATGGACACCATGGCTAC
 Q S T L Q E D E R L G L S F M D T H G Y
 837 TCCCCGAGGCGTCCCTGTGGCCGGAAGGGCTCCCCATACCACACGGGGCAGCTGCACCTT
 S P R R P C G R K G S P Y H T G Q L H P
 877 GGCTTCAAGCAGGAGTATGAGAGCTTCTTTGAAGGCTGGGACGCCACAAAGAAGAAAGAC
 G F X Q E Y E S F F E G W D A T K K K D
 917 CACCGATGCTGGGAGACCCCAATGCCGACTACATTAATGCCAACTACATAGATGGTTAC
 H P M L G D P N A D Y I M A N Y I D G Y
 957 TGGCGTATGGTGTGGCAGGAGCACTGTTCCAGCATCGTCATGATCACCAAGCTGGTCGAG
 W R M V W Q E H C S S I V M I T K L V E
 997 AAGATTATGCTGGTGAAGACAGAGACCCCTGGCTGAGTATGTCGTGCGCACTTTTGCCCTG
 K I M L V K T E T L A E Y V V R T F A L

Fig. 2c

ACCATCTCCAAGCTCGCAATGAGACCTACCATGTCTTCTCCAACCTGCACCCAGGCACC 1801
T I S K L R N E T Y H V F S N L H P G T
 GAGATAACCACTAACATCTCTGCTCCCAGCTTTGATTATGCCGACATGCCGTCACCCCTG 1921
 E I T T N I S A P S F D Y A D M P S P L
 ATCAGTGTGTACCAAGTGATTGTGGAGGAGCGGGCGCAGGCTGCGGCGGGACGAGG 2041
I S V Y Q V I V E E E R A R G C G G T R
 CACTACTTCGGGGCGCAACTGGCGGCCAGCAGTCTACCTGAGGCCATGCCCTTTACCGTG 2161
H Y F G A E L A A S S L P E A M P F T V
 CTCATCTACTTCAGGCAGCAAGCCACCTGAAGGGGGAGACCCGGCTGAATTGCATCCGC 2281
 L I Y F Q A A S H L K G E T R L N C I R
 GAGGAGATGGGGCTTATCTGGGCATCTGTGCAGGGGGCTTGTCTCTCATCCTTCTC 2401
E E M G L I L G I C A G G L A V L I L L
 GTCAACTACCGCCAGGAGAAGACACATGATCAGCGCCGTGGACCGCAGCTTCACAGAC 2521
 V N Y R Q E K T H M M S A V D R S F T D
 AGCACCCGGGGAGACCAGCGCAGCGGTGGGTCACTGAGGCCAGCAGCCTCTGGGGGGC 2541
 S T R G D Q R S G G V T E A S S L L G G
 GCGGTGCGTGTGCAGACCTTCTGCAGCACATCAACCAGATGAAGACGGCCGAGGGTTAC 2761
 A V R V A D L L Q H I N Q M K T A E G Y
 AAGGTC AAGGGCAGCGGCAGGAGCAATGCCTGCCTATGATCGGCACCGAGTGAAACTG 2881
 K V K G S R Q E P M P A Y D R M R V X L
 CACAGGTCAAACCACTTCATAGCCACTCAAGGGCCGAAGCCTGAGATGGTCTATGACTTC 3001
 H R S N H F I A T Q Q P K P E M V Y D F
 GTGGGCAGGGTGAATGCTCACGGTACTGGCCGAGGACTCAGACACCTACGGGGACATC 3121
 V G R V K C S R Y W P E D S D T Y G D I
 GAGCGGAGAGGCTACTCTGCCCGGCACGAGGTCCGCCAGTCCCACCTTCACAGCGTGGCCA 3241
 E R R G Y S A R H E V R Q S H F T A W P

1037 GAGCATGGCGTCCCCTACCATGCCACGGGGCTGCTGGCTTTCATCCGGCGGGTGAAGGCC
 E H G V P Y H A T G L L A F I R R V K A
 CGTTGCTATATCGTCTGGATGTGATGCTGGACATGGCAGAGTGTGAGGGCGTCTGGAC
 1077 G C Y I V L D V M L D M A E C E G V V D
 CAGTACATCTTCATTATGATGCAATCCTGGAGGCGCTGCTGTGTGGGAGACCACCATC
 1117 Q Y I P I H D A I L E A C L C G E T T I
 TCCTCCACGCTGCGGGAAGAGTTCCAGACGCTGAACCTCGGTACCCCGCGCTGGACGTG
 1157 S S Q L R E E F Q T L N S V T P P L D V
 CTGCCGCGGACCGCTGCCTGCCCTTCTCATCTCCACTGATGGGACTCCAACAACATC
 1197 L P P D R C L P F L I S T D G D S N N Y
 CCGCTGCAGAGCACACGCGCGACTTCTGGCGGCTGGTCTACGATTACGGGTGCACCTCC
 1237 P L Q S T T P D F W R L V Y D Y G C T S
 CCAGAGCCAGGCGGCGAGCAATATGGCCTCATGAGGTGGAGTTTATGTCGGGACAGCT
 1277 P E P G R Q Q Y G L M E V E F M S G T A
 GACCTGCTGGTGCGGCACTTCCAGTTCTGCGCTGGTCTGCATACCGGGACACACCTGAC
 1317 D L L V R H F Q F L R W S A Y R D T P D
 GATGGGCGCACCATCTGCACTGCCTAAACGGGGAGGACGCAAGCGGCACTTCTGCGCC
 1357 D G R T I V H C L N G G R S G T F C A
 CAAACCTCCGGAACTACAAACCAACATGGTGGAGACCATGGATCAGTACCACITTTGCT
 1397 Q T L R N Y K P N M V E T M D Q Y H F C
 GGGCACCCATGCACACTCAGGGCCAGACCCACCATCTGGACTGGCGAGGAAGATCATG
 TCTTGCTCCCCCTTCCACTGTGGGAGGGCCTTTCGCTTGCCATGGCGGGTGGTGGG
 GTGCTGAGAGGCTGGTGTGCTGGCTGGCAGAGTGACAAAGGCTCAGGACGGCTGGCTCTGG
 GCAGAGAGCATCCAGGCCAAGGTTCCCACTCAGCCTGCCCCCTCTGCATGTGGGTAGAG
 AGCAGGTCTCAATTCTGATAGCCAGTGGGGCACACTGACTGTCTCCCCAGGGGAACCTGC
 CACTTGCTTCCCTGATATGTGCTCTGACTTCCCTGAACCAGGATCGCCTATTACTGCTG
 CCTCTTCTTTAATCTTCAGGCCTCACTGGCCTGTCTGCTCAGCTTGGGCCAGTGACAA
 CCGTTGTGGGGAGGGCAGTGTAGAGCAGGGCTGGTCATACCTCTGGAGTTCCAGAGCA
 TCTCTTTAAATGGGGCAGGCCACACCCCATTCGGTGCCCTCAATTTCCCATCTGTATAA
 TGTAAGCGCTTTGTAATAAACGTGCTCTGTAATGCCAAAAAAAAAAAAACAAAAA

Fig. 2e

TCCACCCCACTGATGCCGGGCCATTGTCCATCCATGCAGCGCGGCACCGGCCGACAC	3361
S T P P D A G P I V I H C S A G T G R T	
ATTTACAAGTGTGTGAAGACTCTCTGCTCCCGCGTGTCAACATGATCCAGACTGAGGAG	3481
I Y N C V K T L C S R R V N M I Q T E E	
CCTGTCAGTGAGTTCAAGGCCACCTACAAGGAGATGATCCGCATTGATCCTCAGAGTAAT	3601
P V S E F K A T Y K E M I R I D P Q S N	
GAGGAGTGCAGCATCGCCCTGTTGCCCGGAACCGGACAAGAACCGCAGCATGGACGTC	3721
E E C S I A L L P R N R D K N R S H D V	
ATTAATGCAGCCCTGACTGACAGCTACACACGGAGGTGGCCCTTCATGGTGACCTGCAC	3841
I N A A L T D S Y T R R S A F M V T L H	
ATCGTCATGCTCAACCAGTGAACCAGTCCAACCTCCGCTGGCCCTGCCTGCAGTACTGG	3961
I V M L N Q L N Q S N S A W P C L Q Y W	
GATGAAGACTTAGTGCTCGAGTCTTCGGGTGCAGAACATCTCTCGTTGACAGGAGGA	4081
D E D L V A R V F R V Q N I S R L Q E G	
TCCAAGAAGGCCCTTCTGCACCTGCTGGCTGAGGTGGACAAGTGGCAGGCCGAGAGTGGG	4201
S K K A F L H L L A E V D K W O A E S G	
TGCGCCACGGTCTCGGAGATGATCCGCTGCCACAACCTGGTGAGCATTTTCTTTGCTGCC	4321
C A T V L E M I R C H N L V D V F F A A	
TACGATGTGGCCCTGGAGTACTTGGAGGGGCTGGAGTCAAGATAGCGGGGCCCTGGCCTG	4441
Y D V A L E Y L E G L E S R	
GCCTCTGCTCTGCCCAAACACACTCCATGGGGCAAGCACTGGAGTGGATGCTGGGCTA	4561
CCAAGGAGGAGCTTAGCAAGTCTGCACCCCAACCCCACTCCATAGGCTCTGCAGGCCT	4681
GGGACTCAGGCCAAGGGGTTGGCAGGATCCTGGGTTTTGGGAGGGATGAGTGAGGCCCT	4801
GATGTACTGGGACTTGGCATTAGGATTCCATCTGGGGACCCCTGAAGGTCCCCCCCA	4921
AGCGCCCTCCTCCCACTGCCCTCCAGCCCTGAGATATTTTGCTCACTATCCCTCCC	5041
TCCATGGGGGCTCCTTCCCTGCCAGCCACTGTTGCAAGTGAAGTCACTCGCCCC	5161
TCTGCAAGGCTGAACAACAGCCCTGGGGTTGAGGCCCTGTGGCTCCTGGTCAGGCTGC	5281
AGAGGTAGGACCAAGTCTTTTTGTTCTTTTGTATTTTGGTTGGGTGGGAGGAAGG	5401
CTGTAGATATGACTACTGACCTACCTCGCAGGGGCTGTGGGAGGCATAAGCTGATGTT	5521
A	5581

Fig. 2f

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1 GAATTCGGCACGAGCGGGCTGGACCTTGCTCGCCCGCGCCATGAGCCGACGCTGGACTCGG
1 M S R S L D S

121 CGCCGGCGAGTTTCAGCGACATCCAGGCCTGCTCGGCCGCCTGGAAGGCTGACGGCGTGTGCTCCA
26 A G E F S D I Q A C S A A H K A D G V C S

241 GCCTTATGATCAGACGCGAGTAATCCTCTCCCTGCTCCAGGAAGAGGGACACAGCGACTACATTA
66 P Y D Q T R V I L S L L Q E E G H S D Y I

361 ACCCTTGCTCACACCCTGCTAGACTTCTGGAGACTGGTCTGGGAGTTTGGGGTCAAGGTGATCC
106 P L P H T L L D F W R L V W E F G V K V I

481 CCAGGAGCAGGAGCCACTGCAGACTGGGCTTTTCTGCATCACTCTGATAAAGGAGAAGTGGCTGA
146 Q E Q E P L Q T G L F C I T L I K E K W L

601 TGTGTACCAGTACAGTATATGCTTGGCCAGACCGTGGGGTCCCCAGCAGTCTGACCACATGC
186 V Y Q L Q Y M S W P D R G V P S S P D H M

721 TGTCCACTGCAGTGCGGGTTGTGGGCGAACAGCGCTCTGTGCACCGTGGATTATGTGAGGCAGC
226 V H C S A G C G R T G V L C T V D Y V R Q

841 GATGAGGAAGCAGCGGCTGCGGCCGTGCAGACAGAGGAGCAGTACAGGTTCTGTACCACACGG
266 M R K Q R P A A V Q T E E Q Y R F L Y H T

961 CAAAGAGAATTGTGCCCCACTCTACGACGATGCCCTCTTCTCCGGACTCCCCAGGCACCTTCTCG
306 K E N C A P L Y D D A L F L R T P Q A L L

1081 GGGCCACGCCATGGCTGACACCTACGCGGAGGAGCAGAAGCGGGGGTCCAGCGGGCGCCGGGA
346 G H A M A D T Y A E E Q K R G A P A G A G

1201 CTACAGCAAGGTGACGCCGCGGCCAGCGACCCGGGGCGCACGCGGAGGACGCGAGGGGGACGC
386 Y S K V T P R A Q R P G A H A E D A R G T

1321 CGTGGCGGGTGAGCTCAGACCGGTGGGCTAGGTTTCAACCTGCGCATTGGGAGGCCGAAGGTC
426 V A G G A Q T G G L G F N L R I G R P K G

1441 TGTTGCCTCTTGTGAGCTCGGACTGTGATGCCCGGTGCTGTGAGCGCGTGGCCGAGAATGGA
1561 TGCCCAATGACTGTAGCATTCAAGGCTTGAGGCTGGAGGAGGTAGCTAGGGTATAGTGGCTGGT
1681 TTATGAAGGGGAGAAGGGACAGATGAGCTTCCGGAGACTGCTCTCTCACCACACAGCACTAGTC
1801 GTGGATGGACACTTCGCCATCCAGGCAGAACTAAGCCAGGCATAACCACAGCCAGCAGATTAA
1921 AACCTGGACAGACAGCCAAAGCTTCAGAGATACAGTCCACAGGTGGACAAAGGATCCCCAGCCA
2041 AAACACAGCCCCCAAAGACAGACATCTCTGCTAGCTGGACAGCCAGGTGGACCCCCCTAAGTTAG
2161 TCAGACCCCACTCCCTCAGGTGGGTGGCTGGCTGACAGACCTTCTGGCCAGACAGACTCTAAC

Fig. 3a

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CGCCGAGCTTCTGGAGCGCTGGAAGCGGGGCGCCGGGAGGGGGCAGTCCT	120
A R S F L E R L E A R G G R E G A V L	26
CCGTGGCCGGCAGTCGGCCAGAGAACGTGAGGAAGAACCGCTACAAAGACGTGCT	240
T V A G S R P E N V R K N R Y K D V L	66
ATGGCAACTTCATCCGGGGCGTGGATGGAAGCCTGGCCTACATTGCCACGCAAGG	360
N G N F I R G V D G S L A Y I A T Q G	106
TGATGGCCTGTGAGAGATAGAGAATGGGCGGAAAAGGTGTGAGCGGTACTGGGC	480
L M A C R E I E N G R K R C E R Y W A	146
ATGAGGACATCATGCTCAGGACCCCTCAAGGTCACATTCAGAAGGAGTCCCGTTC	600
N E D I M L R T L K V T F Q K E S R S	186
TCGCCATGGTGGAGGAAGCCCGTCGCCCTCAGGGATCTGGCCCTGAACCCCTCTG	720
L A M V E E A R R L Q G S G P E P L C	226
TGCTCTGACCCAGATGATCCACCTGACTTCAGTCTCTTTGATGTGGTCCTTAA	840
L L L T Q M I P P D F S L F D V V L K	266
TGGCTCAGATGTTCTGCTCCACACTCCAGAATGCCAGCCCCACTACCAGAACAT	960
V A Q M F C S T L Q N A S P H Y Q N I	306
CCATACCCCGCCACCAGGAGGGGTCCTCAGGAGCATCTCTGTGCCCGGGTCCCC	1080
A I P R P P G G V L R S I S V P G S P	346
GTGGGACGACAGGGGACGGGGACGGGGCGCGAGGGCGGAGGAGCGCGCT	1200
S G T Q T G T G T G A R S A E E A P L	386
TGCCCTGGCCGCGTTCTGCTGACCAAAGTCCTGCCGGATCTGGCGCTACGAGGA	1320
L P G R V P A D Q S P A G S G A Y E D	426
CCCGGGACCCGCTGCTGAGTGAGCCGGGGTGAAGTCTAACGCCAGTTCTGCC	1440
P R D P P A E W T R V *	459
AACAGTGGGCCTGGATCAAAGTTAAAGTTTCTCAGGGTGGGAAATGTGGGGGCTT	1560
AGGCTGCACAGAGCAGATTCAAGAAAGAAGATCAGGAAGGGGATGACCCCTGAG	1680
CATCCTCAGCACCTGAGCCTCCCTCACTTGGACACTCAGGGGACCACACAGAGAA	1800
CCCAGGCAGACCGATAAAAAGACCTCCAGATAGGCAGACAGACAGATGGACCACC	1920
GAGAGAGAGAGACCAGCCAACAGCTTGATAGACCAGTGACGCCAGAGAGACCACC	2040
TCAGATTACTAGACAGATATAAACAGATCCCCTGCTGAACAGATATACAGAGTTC	2160
CAACCAGATGGACTGCCAGACAGGCAGACATCAGTCCACATGGAATCTTGACATC	2280

2281 CCAGCCAGCCGGCCAGACTCTCATCTTGATGTCTTGATGGATGGACCCAGCTAGTCAGACATGA
2401 ACAGATGGAGCCCCAGCAAATCAGGACCTATCTAGGCAGACCCAGCCAGACCCCCGCCAGACAG
2521 TACAGGTCTAA[TTTTTTTTTTTT]AAGAAATGAGTTTTTGCCATGTTGCCAGACTGGTCTTGA
2641 GGTGTGAGCCACCAGGCTCAGCCCCCTAAGATTTGAAACACTTTAAATGGCCCATGGTAGGGTTC
2761 CTGTGCAA

Fig. 3c

TCCTCCAGATTGACAGACAAGTCCCCCAATGAGTACACATCTCCAGCTATTGAG 2400
ACTCCCAACCAGACTGACCCCTTGCTGTTACACAGCCTGCCGAGTAGCTGGGAC 2520
ACTCCCAACCTCAAGCAATCCTCTGCCTCAGCCTCCCAAAGTGCTGAGATTACA 2640
CTGCTAGGATAAAACATTAAGTGGCTGTTAAAGAAATAAAAGGAGGACACGTCT 2760
2810

Fig. 3d

MCLK1	MRHSKRTYC-----PDWDERDWDYGTWRSSSSHKKRKRSHSSAREOKR	43
MCLK2	P.PR.YHSSERGRSGSYHEHYQSRKHKRRR.R.WSSSSDRTRRR.REDS	50
MCLK3	H.C..YRSPEPDPLYTYRWK.RRS.SREHEGRILRYPSR.EPPPR.S----	47
MCLK4	.....H-----S.ESWGHESY.G-----R.....TO.NRH	42
MCLK1	CRVDHSKTTDSYYLESRSINEKAYHSRRYVDEY--RNDYMGYPGHPYGE	91
MCLK2	YHVRSRSSY.DHSSDR.LY-----D.RYCGSYR....SRDRGEAY.DT	93
MCLK3	SRE.APYRTRKHAHHCHK.RTRSCSSASSRSQQSSKRSSR-----	94
MCLK4	.KPH.QFKDSDCHYLEARCLNERDYRD.RYIDBY....CEGVPRH.HR	91
MCLK1	PGSRYQMHS-SKSSGRSGRSSYKSKHRSRHHTSQHSHDGSHRRKRRSV	140
MCLK2	DFRQSYEYHREN..Y..Q...RRKHR.R.RRSRTFSRSSSHSS.RAK...	142
MCLK3	SRE.APYRTRKHAHHCHK.RTRSCSSASSRSQQSSKRSSR-----	136
MCLK4	DVESTYRIHC....V..R...P.R.RNRPCASH.S.....I	139
MCLK1	EDDEEGHLCQSGDVLARSYEIVDTLGEAGFGKVVEICIDHKVGGRRAVAK	190
MCLK2	...A.....YHV..W.QE.....S.....TS.R..Q...RR..T...L	192
MCLK3	...K...V.RI.SW.QE.....GN...T.....L..ARGKSQ..L	186
MCLK4	.....R.....R.....GMD.LH...	189
MCLK1	IVKNVDRYCEAAQSEIQVLEHLNTTDPHSTFCVQMLEWFHRGHICIVF	240
MCLK2	.I...EK.K...RL..N...KI.EK..KNKNL...FD..DYH..M..S.	242
MCLK3	.IR..GH.R...RL..N...KKIKEK.KENK.L.L.SD.NFH..M..A.	236
MCLK4	...GG.R...R.....S...N.V.....D.H..V...	239
MCLK1	ELLGLSTYDFIKENSFLPFMRMDHIRKMAYQICKSVNFLHSNKLTHDLKP	290
MCLK2	.....F..L.D.NY..YPIHQV.H..F.L.QA.K...D.....	292
MCLK3	.....KN.FE.L...N.Q.YPLP.V.H...L.HALR...E.Q.....	286
MCLK4	.....QI.....Q...Q.I...H.....	289
MCLK1	ENILFVKSDYTEANPKMKRDERTIVNPDIKVDFGSATYDDEHHS TLVS	340
MCLK2	.....N...ELT..LEK...SVKSTAVR.....F.H...I...	342
MCLK3	.....N..EFETL..EHKSCE.KSVK.TSIR.A...F.H...T.I.A	336
MCLK4	.....VVK..S.....LK.T.....	339
MCLK1	TRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFPTHDSREHLAMM	390
MCLK2	.....E.....IF...V...L.Q...N.....	392
MCLK3	.....P.....E...A.....F...R...L.Q...K.....	386
MCLK4	.....Q...K.....	389
MCLK1	ERILGPLPKHMIQKTRKRRYFHHDRLDWDEHSSAGRYVSRRCKPLKEFML	440
MCLK2	.....V.SR..R...QK..YRG.....NT.....REN.....RRYLT	442
MCLK3	.K...I.S...HR...QK..YKGG.V...N.D...KEN.....SY...	436
MCLK4	.....I.A.....K...NQ.....R.....	439
MCLK1	SQDAEHEFLFDLVGKILEYDPAKRITLKEALKHPFFYPLKHT	483
MCLK2	.EAD.HQ.....IENM...E...L.G...Q...AC.RTEPPNTKLWD	492
MCLK4	QDSL.VQ...MRRM..F...Q...A...L...AG.TPEERSFHSSSR	486
MCLK5	CHDE...K...RRM.....R...D...Q...DL..RK	489
MCLK1	SSRDISR	499
MCLK2	NPSR	496
MCLK3		
MCLK4		

SIRP4	58
SIRP1	57

	MEACAPACRIGPLLC[LLAASCAMSVGAGE]EELQVIOPEKSVSVAAGESANIT[CTVTI]
	MEVPASWPH[PSFFL]KTLGLRLTSVAGEDELOVIOPEKSVSVAAGESANIT[RCMTI]
4	116
1	115
	SLIPVGPICWFRGAGPARELIYNQKEGHEPRVTVTVSESTKRN[DFISISISNITPADA]
	SLIPVGPICWFRGAGARELIYNQKEGHEPRVTVTVSE[TKRNUNFISISISNITPADA]

4	173
1	173
	CTYYCVKFRKGSPT-EFKSGAGTELSVRAKPSAPVWGGPAPARAT[CHTVSFTCESHG]
	CTYYCVKFRKGSPE-EFKSGAGTELSVRAKPSAPVWGGPAPVPLAT[CHTVSFTCESHG]
4	231
1	231
	FSPRDITLKWFKNGNELSDFQTNVDH[GESVSYSIHSIAKMWLTR]EDVHSQVICEV[AH]
	FSPRDITLKWFKNGNELSDFQTNVDH[GESVSYSIHSIATARNVLT]R[EDVHSQVICEV[AH]
4	289
1	289
	VTLOGDPLRGTA[NLSE]IRVPPTLEVTQO[HAENQ]NVTQCVK[RYFQ]PLQLTWLEN
	ITLQGDPLRGTA[NLSE]IRVPPTLEVTQO[HAENQ]NVTQCV[SNFY]RQLOLTWLEN
4	347
1	347
	GNVSRTE[TASTI]ENKDGTYNWM[SWLLVNI]SAHRDDV[MLTCQVEH]DGC[PAVSKSHD]K
	GNVSRTE[TASTI]ENKDGTYNWM[SWLLVNI]CAHRDDV[MLTCQVEH]DGC[PAVSKSYALE]
4	405
1	398
	VSAHKE[QGSNTA]EN[GTGSNERNIYIVUGV]VCT[LLVALLMAALYLVR]IRQKKAQGSTS
	ISAHKE[QGSNTA]EN[GTGSNERNIYIVUGV]VCT[LLVALLMAALYLVR]IRQKKAQGSTS
4	463
	STRLHEPEKNAREITQD[TNDI]TYADINLPGK[KKPAPQAAEPNNHTE]YASIQTSPPQAS
4	503
	EDTLTYADLDVHLNR[TPKQ]PAPKPEBPSFSEYASVQVPRK

Fig. 5